

THE CLAIMS

1. A vial and tamper evident cap combination, comprising:
 - a vial having a screw thread top;
 - a cap for the vial, screwable thereon; and
 - at least a first latch having a component extending from the vial below the screw thread top and a component extending from the cap and lockable to the vial - extension component when the cap is screwed onto the vial, whereby unscrewing rotation of the cap can break either or both of the first latch components.
2. The combination of claim 1 including a second latch having a component extending from the vial below the screw thread top and a component extending from the cap lockable to the vial - extension component when the cap is screwed onto the vial, whereby unscrewing rotation of the cap can break either or both of the second latch components.
3. The combination of claim 1 including a loop formed to encircle the vial below the screw thread top and bearing said component extending from the vial.
4. The combination of claim 3 including at least one restraining rib on the vial spaced below the screw thread top and sized to permit the loop to be forced upwardly thereover and to thereafter restrain the loop from downward movement.
5. The combination of claim 4 including a limiting flange on the vial spaced below the screw thread top and above the loop restraining rib sufficient to accommodate the loop and sized to limit upward movement of the loop.
6. The combination of claim 3 including a tether connecting the loop to the cap.

7. The combination of claim 1 in which one of said latch components is a latch staple and the other of said latch components is a hasp.
8. The combination of claim 7 in which the vial - extension component is a hasp and the cap latch component is a latch staple.
9. The combination of claim 1 in which said latch is irreversibly lockable.
10. A vial and tamper evident cap combination, comprising:
 - a vial having a screw thread top;
 - a cap for the vial, screwable thereon;
 - a loop connected by a tether to the cap and formed to encircle the vial below the screw thread top;
 - a first latch having a component extending from the loop and a corresponding component extending from the cap irreversibly lockable to the loop component when the cap is screwed onto the vial, whereby unscrewing rotation of the cap can break either or both of the first latch components;
 - a second latch having a component extending from the loop and a corresponding component extending from the cap irreversibly lockable to the loop component when the cap is screwed onto the vial, whereby unscrewing rotation of the cap can break either or both of the second latch components;
 - at least one restraining rib on the vial spaced below the screw thread top and sized to permit the loop to be forced upwardly thereover and to thereafter restrain the loop from downward movement;
 - a limiting flange on the vial spaced below the screw thread top and above the loop restraining rib sufficient to accommodate the loop and sized to limit upward movement of the loop;
11. The combination of claim 10 in which one of the components of each of said latches is a latch staple and the corresponding component of each of said latches is a

hasp.

12. The combination of claim 11 in which each loop latch component is a hasp and each cap latch component is a latch staple.

13. A tamper evident cap for engaging a vial having a screw thread top, comprising: screw threads corresponding to such a vial defined on the inner surface of the cap;

 a loop tethered to the cap and formed to encircle such a vial below its screw thread top; and

 at least a first latch having a latch component extending from the loop and a corresponding latch component extending from the cap lockable to the loop latch component when the cap is screwed onto such a vial, whereby unscrewing rotation of the cap can break either or both of the first latch components.

14. The cap of claim 13 including a second latch having a latch component extending from the loop and a corresponding latch component extending from the cap lockable to the loop latch component when the cap is screwed onto such a vial, whereby unscrewing rotation of the cap can break either or both of the second latch components.

15. The combination of claim 13 in which one of said latch components is a latch staple and the other of said latch components is a hasp.

16. The combination of claim 15 in which the loop latch component is a hasp and the cap latch component is a latch staple.

17. The combination of claim 10 in which each latch is irreversibly lockable.

18. A tamper evident cap for engaging a vial having a screw thread top, comprising:
screw threads corresponding to such a vial defined on the inner surface of the cap;
a loop tethered to the cap and formed to encircle such a vial below its screw
thread top; and

 a first latch having a latch component extending from the loop and a
corresponding latch component extending from the cap lockable to the loop latch
component when the cap is screwed onto such a vial, whereby unscrewing rotation of
the cap can break either or both of the first latch components; and

 a second latch having a latch component extending from the loop and a
corresponding latch component extending from the cap lockable to the loop latch
component when the cap is screwed onto such a vial, whereby unscrewing rotation of
the cap can break either or both of the second latch components.

19. The cap of claim 18 in which one of the latch components of each of said latches
is a latch staple and the corresponding latch component of each of said latches is a
hasp.

20. The cap of claim 19 in which each loop latch component is a hasp and each cap
latch component is a latch staple.

21. The combination of claim 18 in which each latch is irreversibly lockable.

22. A method for assuring the integrity of a specimen from a donor, comprising:
providing a vial, a cap for the vial, and two latches capable of locking the cap to
the vial;
locking the cap to the vial, when the vial is empty, with one of the two latches;
breaking the lock;
inserting a specimen in the vial; and
locking the cap to the vial with the other of the two latches.

23. The method of claim 22 in which said one of the two latches is broken in the presence of the specimen donor.

24. The method of claim 23 in which the cap is locked with said other of the two latches in the presence of the specimen donor.

25. The method of claim 22 in which said one of the two latches is broken in the presence of a witness who can testify as to chain of custody.

26. The method of claim 25 in which the cap is locked with said other of the two latches in the presence of a witness who can testify as to chain of custody.

27. The method of claim 22 in which the vial has a screw thread top and the cap is screwable thereon, whereby unscrewing rotation of the cap can break either locked latch.

28. The method of claim 27 in which there is a loop connected by a tether to the cap and formed to encircle the vial below the screw thread top, each latch having a component extending from the loop and a corresponding component extending from the cap lockable to the loop component when the cap is screwed onto the vial.

29. The method of claim 28 in which the vial is formed with at least one restraining rib spaced below its screw thread top and sized to permit the loop to be forced upwardly thereover and to thereafter restrain the loop from downward movement.

30. The method of claim 29 in which the vial is formed with a limiting flange spaced below the screw thread top and above the loop restraining rib sufficient to accommodate

the loop and sized to limit upward movement of the loop.

31. The method of claim 22 in which one of the components of each of said latches is a latch staple and the corresponding component of each of said latches is a hasp.

32. The method of claim 31 in which each loop latch component is a hasp and each cap latch component is a latch staple.

33. The method of claim 22 in which each latch is irreversibly lockable.

34. A method for assuring the integrity of a specimen from a donor, comprising:
providing a vial having a screw thread top, a cap for the vial screwable thereon, a loop connected by a tether to the cap and formed to encircle the vial below the screw thread top, at least one restraining rib on the vial spaced below its screw thread top and sized to permit the loop to be forced upwardly thereover and to thereafter restrain the loop from downward movement, a limiting flange on the vial spaced below the screw thread top and above the loop restraining rib sufficient to accommodate the loop and sized to limit upward movement of the loop, and two latches capable of locking the cap to the vial, each latch having a component extending from the loop and a corresponding component extending from the cap lockable to the loop component when the cap is screwed onto the vial;

locking the cap to the vial, when the vial is empty, with one of the two latches;
unscrewing the cap whereby to break the lock in the presence of the specimen donor or in the presence of a witness who can testify as to chain of custody;

inserting a specimen in the vial; and

locking the cap to the vial with the other of the two latches in the presence of the specimen donor or in the presence of a witness who can testify as to chain of custody, the other of the two latches being breakable by unscrewing rotation of the cap.

35. The method of claim 34 in which one of the components of each of said latches is a latch staple and the corresponding component of each of said latches is a hasp.

36. The method of claim 35 in which each loop latch component is a hasp and each cap latch component is a latch staple.

37. The method of claim 34 in which each latch is irreversibly lockable.